

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Applicants affirm the election, with traverse, of Claims 1-12 directed to a medical pump monitoring system. The election is made with traverse because it is respectfully submitted that all of the claims in this application can be examined at the same time without serious burden. That is, it is expected that the search associated with the elected invention would be substantially coextensive with that associated with the non-elected claims. Further, examining the claims directed to the non-elected inventions would only require consideration of a few additional claims. Accordingly, withdrawal of the restriction requirement and examination of all of the claims of this application is respectfully requested.

Claim 10 is amended to address the objection set forth near the bottom of page six of the Official Action. In addition, Claims 1-12 are amended to present the claimed subject matter in a manner more closely corresponding to standard U.S. practice to thereby respond to the concerns expressed in the top half of page seven of the Official Action. Accordingly, withdrawal of the claim rejection based on the second paragraph of 35 U.S.C. § 112 is respectfully requested.

As mentioned, the amended claims presented here are worded to better define the claimed subject matter at issue here. The only independent claim currently under consideration is Claim 1. This claim defines a medical pump monitoring system that administers medical fluids and the like for a patient through use of plural pumps monitors the flow of delivered fluids and alarm information of the medical pumps. As claimed, the medical pump monitoring system includes a control

unit, a display unit and an infusion circuitry creating unit. The infusion circuitry creating unit is configured to create infusion circuitry data defining connection conditions of infusion lines from the medical pumps, as well as administration passes and/or administration positions for the patient. The control unit controls the display unit to display the created infusion circuitry data with information from the medical pumps connected according to the created infusion circuitry data. This display occurs at a pump information display area on a monitor screen of the display unit according to operations performed by an operator of the medical pump monitoring system.

The pump information display area at which is displayed the created infusion circuitry data includes an area for displaying respective operation conditions of different ones of the medical pumps in a visually distinguishing manner, areas for displaying respective flow amounts of the medical pumps, areas for displaying respective alarm information for medical pumps, areas for displaying respective administered drug information for medical pumps, and an area for displaying the infusion circuitry for delivery medical fluids to the patient according to the created infusion circuitry data.

The subject matter recited in Claim 1 is supported by the original disclosure. For example, Fig. 11 illustrates the control unit 1101 and the display unit 1100, while Fig. 5 illustrates the circuitry creation unit 541. The discussion in the application beginning near the top of page 13 and extending onto page 18 describes the infusion circuitry creating unit and the way in which it permits creation of infusion circuitry data defining the connection conditions of infusion lines from the pumps. These portions of the disclosure also describe the aspects of the pump information display

area recited in Claim 1 and further describe the way in which the control unit controls the display unit 1100 to display the created infusion circuitry data in a display region 540 as illustrated in Fig. 5. pump information display area.

U.S. Patent No. 6,671,563 to Engelson et al. discloses a patient care managing system that facilitates management of patient care administration. The system involves the use of a local area network that includes a file server 45 connected to a computer 60 in a pharmacy, a nursing station 70 and a bedside CPU 80. The file server 45 stores various programs, and collects data inputted from the various computers in the local area network. As a part of the system, alarms or alerts can be generated to appropriate individuals or displays. In this regard, the discussion beginning near the bottom of column 6 of Engelson et al. points out that the system can be outfitted with an alarm that sounds when a pump 92 is deemed to be occluded. Later, Engelson et al. describes in column 14 that the infusion pump 92 can be controlled and monitored as desired and intended.

Studying the disclosure in Engelson et al. reveals that there exists no disclosure of a medical pump monitoring system that includes, in combination with the other claimed features, an infusion circuitry creating unit for creating infusion circuitry data defining connection conditions of infusion lines from plural medical pumps. Nor does the reference disclose a control unit that controls a display unit to display such created infusion circuitry data with information from the medical pumps connected according to the created infusion circuitry data. Further, Engelson et al. does not utilize a pump information display area having the visually distinguishable areas as claimed. It is thus respectfully submitted that the anticipatory rejection of

independent Claim 1 based on the disclosure in Engelson et al. is not applicable and should be withdrawn.

Australian Application Publication No. 199929073 to Lohmeier et al. discloses a system for monitoring and/or controlling infusion pumps. Fig. 1 of the reference illustrates one example of several infusion pumps 101A-101C connected to a central infusion pump monitor 110. The system also includes a display unit(s) 304 such as illustrated in Fig. 3, together with an input unit(s) 305.

The discussion beginning near the bottom of page 20 of Lohmeier et al. describes the way in which the display unit 304 visually represents the topological arrangement of the infusion pumps. The system also allows the user to instruct a specific infusion pump by selecting the desired pump through use of the input unit 305.

However, Lohmeier et al. lacks disclosure of an infusion circuitry creating unit that creates an infusion circuitry data defining connection conditions of infusion lines from the infusion pumps as recited in independent Claim 1. The reference also does not disclose a display unit that displays the created infusion circuitry data in a pump information display area on a monitor screen of the display unit according to operations from an operator. Further, the reference lacks disclosure of a pump information display area that includes an area displaying operation conditions of the different medical pumps using visually distinguishing characteristics.

It is thus respectfully submitted that the pump monitoring system recited in independent Claim 1 is also patentably distinguishable over the disclosure in Lohmeier et al. Accordingly, withdrawal of the anticipatory rejection based on the disclosure in Lohmeier et al. is respectfully requested.

The dependent claims define additional distinguishing aspects associated with the pump monitoring system. As these dependent claims are allowable at least by virtue of their dependence from allowable independent Claim 1, a detailed discussion of the additional distinguishing aspects of the medical pump monitoring system recited in each of the dependent claims is not set forth at this time. However, several points are briefly noted.

For example, Claim 2 defines the reading unit that reads an infusion circuitry diagram, including a handwritten diagram, and also recites that the infusion circuitry data displayed on the monitor screen during operation of the medical pump monitoring system is selected from the data created by the infusion circuitry creating unit and the data read by the reading unit. These additional features of the pump monitoring system, which are generally discussed on page 22 and the top of page 23 of the application, are not disclosed in any of the cited references.

Dependent Claim 4 recites the determination unit that determines whether or not the infusion line is suited to a practical method, and Claim 6 goes on to recite that the determination unit determines whether a loop-shaped line in the infusion line exists, and outputs an alarm if so. These aspects of the claimed medical pump monitoring system are also not disclosed in the cited references.

Dependent Claims 7-11 go on to recite additional aspects of the determination unit that further distinguish over the cited references.

Early and favorable action concerning this application is respectfully requested.


Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful

in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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